

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

The current claim set of the application is presented below. Indications as to the status of the claims (“original”, “currently amended”, “cancelled”, “new”, etc.) appear in parentheses after the claim number. Deletions are identified in bold with double brackets and strikethrough (e.g. ~~[[deletion]]~~) and new text is identified in bold with underlining (e.g. **new language**).

1. (Previously presented) The illumination system:

a plurality of light source modules, each light source module comprising a light-emitting surface;

a light tunnel having an entrance; and

a system of optical elements disposed between the plurality of light source modules and the light tunnel;

wherein the system of optical elements images the emitting surfaces of the light source modules onto the entrance of the light tunnel.

2. (Previously presented) The illumination system as recited in claim 1, wherein images of the emitting surfaces are substantially superimposed to form an illumination patch, said illumination patch substantially filling the entrance of the light tunnel.

3. (Canceled)

4. (Previously presented) The illumination system as recited in claim 2, wherein a shape of at least one of the emitting surfaces substantially matches a shape of the entrance of the light tunnel.

5. (Previously presented) The illumination system as recited in claim 4, wherein the shape of the entrance of the light tunnel is substantially square.

6. (Canceled).

7. ((Previously presented) The illumination system as recited in claim 4, wherein the shape of the entrance of the light tunnel is substantially rectangular.

8. (Canceled).

9. (Previously presented) The illumination system as recited in claim 2, wherein a shape of at least one of the emitting surfaces is substantially square, a shape of the entrance of the light tunnel is substantially rectangular, and the system of optical elements is configured so that a shape of the illumination patch substantially matches the shape of the entrance of the light tunnel.

10. (Previously presented) The illumination system as recited in claim 1, wherein the plurality of light source modules are disposed in an array within a non-radially symmetrical aperture.

11. (Previously presented) The illumination system as recited in claim 1, wherein images of the emitting surfaces are closely packed thus forming an illumination patch, said illumination patch substantially filling the entrance of the light tunnel.

12. (Previously presented) The illumination system as recited in claim 1, wherein images of the emitting surfaces overlap thus forming an illumination patch, said illumination patch substantially filling the entrance of the light tunnel.

13. (Canceled).

14. (Previously presented) The illumination system as recited in claim 1, wherein the light source modules and the system of optical elements are configured to form a plurality of channels aimed substantially into the entrance of the light tunnel.

15. (Previously presented) The illumination system as recited in claim 14, wherein the light source modules are disposed tangentially to and along a spherical surface.

16. (Previously presented) The illumination system as recited in claim 14, wherein the light source modules are disposed substantially coplanar with each other and the system of optical elements comprises means for aiming at least some light from each light source module substantially toward the entrance of the light tunnel.

17. (Canceled).

18. (Canceled).

19. (Previously presented) The illumination system as recited in claim 1, wherein each light source module comprises a plurality of emitting surfaces of different colors disposed next to each other.

20. (Previously presented) The illumination system as recited in claim 19, wherein each light source module comprises a first light-emitting surface of a first color, a second light-emitting surface of a second color and a third light-emitting surface of a third color.

21. (Canceled).

22. (Canceled).

23. (Previously presented) The illumination system as recited in claim 20, wherein the system of optical elements comprises dichroic mirrors.

24. (Canceled).

25. (Canceled).

26. (Previously presented) The illumination system as recited in claim 20, wherein the first, second and third colors are primary colors.

27. (Canceled).

28. (Canceled).

29. (Previously presented) An illumination system, comprising:
a plurality of light source modules disposed in an array within a non-radially symmetrical aperture;

an illumination target; and

a system of optical elements disposed between the plurality of light source modules and the illumination target,

wherein the illumination target is an image-forming device having a plurality of mirrors rotatable about a pivot axis, and wherein the non-radially symmetrical aperture has a long dimension and a short dimension and is oriented so that the long dimension is aligned with the pivot axis of the mirrors of the image-forming device.

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Previously presented) An illumination system, comprising:
a plurality of light source modules, each light source module comprising a light-emitting surface;
an image-forming device; and
a system of optical elements disposed between the plurality of light source modules and the image-forming device;
wherein the system of optical elements images the emitting surfaces of the light source modules onto the image-forming device.

35. (Previously presented) The illumination system as recited in claim 34, wherein images of the emitting surfaces are substantially superimposed to form an illumination patch, said illumination patch substantially filling the image-forming device.

36. (Previously presented) The illumination system as recited in claim 35, wherein the illumination patch overfills the image-forming device.

37. (Previously presented) The illumination system as recited in claim 34, wherein a shape of at least one of the emitting surfaces substantially matches a shape of the image-forming device.

38. (Currently amended) The illumination system as recited in claim 37, wherein the shape of the image-forming device is substantially square.

39. (Currently amended) The illumination system as recited in claim 37, wherein the shape of the image-forming device is substantially rectangular.

40. (Previously presented) The illumination system as recited in claim 34, wherein a shape of at least one of the emitting surfaces is substantially square, a shape of the image-forming device is substantially rectangular, and the system of optical elements is configured so

that a shape of the illumination patch substantially matches the shape of the image-forming device.

41. (Previously presented) The illumination system as recited in claim 34, wherein the plurality of light source modules are disposed in an array within a non-radially symmetrical aperture.

42. (Previously presented) The illumination system as recited in claim 34, wherein images of the emitting surfaces are closely packed thus forming an illumination patch, said illumination patch substantially filling the image-forming device.

43. (Previously presented) The illumination system as recited in claim 34, wherein images of the emitting surfaces overlap thus forming an illumination patch, said illumination patch substantially filling the image-forming device.

44. (Previously presented) The illumination system as recited in claim 34, wherein the image forming device is an LCD comprising a plurality of pixels.

45. (Previously presented) The illumination system as recited in claim 34, wherein the light source modules and the system of optical elements are configured to form a plurality of channels aimed substantially into the image-forming device.

46. (Previously presented) The illumination system as recited in claim 45, wherein the light source modules are disposed tangentially to and along a spherical surface.

47. (Previously presented) The illumination system as recited in claim 45, wherein the light source modules are disposed substantially coplanar with each other and the system of optical elements comprises means for aiming at least some light from each light source module substantially toward the image-forming device.

48. (Previously presented) The illumination system as recited in claim 34, wherein each light source module comprises a plurality of emitting surfaces of different colors disposed next to each other.

49. (Previously presented) The illumination system as recited in claim 34, wherein each light source module comprises a first light-emitting surface of a first color, a second light-emitting surface of a second color and a third light-emitting surface of a third color.

50. (Previously presented) The illumination system as recited in claim 49, wherein the image forming device comprises first, second and third color zones, and wherein the system of optical elements images the first emitting surface onto the first color zone, the second emitting surface onto the second color zone, and the third emitting surface onto the third color zone.

51. (Previously presented) The illumination system as recited in claim 49, wherein the first, second and third colors are primary colors.

52. (Previously presented) The illumination system as recited in claim 34, wherein the system of optical elements comprises dichroic mirrors.

53. (Previously presented) The illumination system as recited in claim 34, wherein the system of optical elements comprises a lenticular array disposed between the plurality of light source modules and the image-forming device.

54. (New) An illumination system comprising:
a plurality of light source modules, each light source module comprising a light-emitting surface;
a light tunnel having an entrance; and
a system of optical elements disposed between the plurality of light source modules and the light tunnel,

wherein the system of optical elements images the emitting surfaces of the light source modules onto the entrance of the light tunnel, and the system decreases etendue degradation.

55. (New) The illumination system as recited in claim 54, wherein images of the emitting surfaces are substantially superimposed to form an illumination patch, said illumination patch substantially filling the entrance of the light tunnel.

56. (New) The illumination system as recited in claim 54, wherein a shape of at least one of the emitting surfaces substantially matches a shape of the entrance of the light tunnel.

57. (New) The illumination system as recited in claim 54, wherein the plurality of light source modules are disposed in an array within a non-radially symmetrical aperture.

58. (New) The illumination system as recited in claim 54, wherein images of the emitting surfaces are closely packed thus forming an illumination patch, said illumination patch substantially filling the entrance of the light tunnel.

59. (New) The illumination system as recited in claim 54, wherein images of the emitting surfaces overlap thus forming an illumination patch, said illumination patch substantially filling the entrance of the light tunnel.

60. (New) The illumination system as recited in claim 54, wherein the light source modules and the system of optical elements are configured to form a plurality of channels aimed substantially into the entrance of the light tunnel.

61. (New) The illumination system as recited in claim 54, wherein each light source module comprises a plurality of emitting surfaces of different colors disposed next to each other.

62. (New) An illumination system comprising:

a plurality of light source modules, each light source module comprising a light-emitting surface;

an illumination target; and

a system of optical elements disposed between the plurality of light source modules and the illumination target,

wherein the system of optical elements images the emitting surfaces of the light source modules onto the illumination target, and the light source modules and the system of optical elements are configured to form a plurality of channels aimed substantially onto the illumination target.

63. (New) The illumination system as recited in claim 63, wherein the light source modules are disposed tangentially to and along a spherical surface.

64. (New) The illumination system as recited in claim 63, wherein the light source modules are disposed substantially coplanar with each other and the system of optical elements comprises means for aiming at least some light from each light source module substantially toward the illumination target.